

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
26 August 2004 (26.08.2004)

PCT

(10) International Publication Number  
**WO 2004/071383 A3**

- (51) International Patent Classification<sup>7</sup>: **A61K 31/46**, 31/4164, 45/06, A61P 11/00
- (21) International Application Number:  
PCT/EP2004/001141
- (22) International Filing Date: 7 February 2004 (07.02.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
03002984.7 11 February 2003 (11.02.2003) EP
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
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- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- with international search report
  - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:  
3 March 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NEW PHARMACEUTICAL COMPOSITIONS BASED ON ANTICHOLINERGICS AND INHIBITORS OF TNF ALPHA SYNTHESIS OR ACTION

(57) Abstract: The present invention relates to novel pharmaceutical compositions based on anticholinergics and TNF-alpha-antagonists, processes for preparing them and their use in the treatment of respiratory diseases.

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/001141

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/46 A61K31/4164 A61K45/06 A61P11/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, EMBASE, MEDLINE, CHEM ABS Data, WPI Data, PAJ, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/00679 A (NOVARTIS ERFIND VERWALT GMBH ; NOVARTIS AG (CH); BEATTIE DAVID (GB); C) 3 January 2002 (2002-01-03) page 7, paragraph 3 - page 8, paragraph 3 page 11, paragraph 2	1-4,7-23
Y	----- WO 01/87849 A (KANE JOHN L ; QIAO SHUANG (US); VINICK FRED (US); GENZYME CORP (US); N) 22 November 2001 (2001-11-22) claims 71,90,98-100	1-4,7-23
Y	----- WO 02/072095 A (BOEHRINGER INGELHEIM PHARMA ; DISSE BERND (DE)) 19 September 2002 (2002-09-19) the whole document ----- -/-	1-4,7-23

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

30 August 2004

Date of mailing of the international search report

12. 01. 2005

Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/001141

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>HANSEL T T ET AL: "TIOTROPIUM BROMIDE: A NOVEL ONCE-DAILY ANTICHOLINERGIC BRONCHODILATOR FOR THE TREATMENT OF COPD" DRUGS OF TODAY / MEDICAMENTOS DE ACTUALIDAD, J.R. PROUS SS.A. INTERNATIONAL PUBLISHERS, ES, vol. 38, no. 9, September 2002 (2002-09), pages 585-600, XP009022208 ISSN: 0025-7656 page 596, column 1, paragraph 2 - page 597, column 1, paragraph 1 -----</p>	1-4,7-23
A	<p>BARNES P J: "NEW TREATMENTS FOR COPD" NATURE REVIEWS. DRUG DISCOVERY, NATURE PUBLISHING GROUP, BASINGSTOKE, GB, vol. 1, no. 6, June 2002 (2002-06), pages 437-446, XP009031498 ISSN: 1474-1784 page 439, column 2, paragraph 3 page 440, column 2, paragraph 3 -----</p>	1-4,7-23

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/001141

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-4, 7-23 (all partially)

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4, 7-23 (all partially)

Pharmaceutical compositions, containng one or more anticholinergics, selected from among tiotropium salts, oxitropium salts or ipratropium salts, combined with GENZ 80825 or GENZ 29155

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2. claims: 1-4, 7-23 (all partially)

Pharmaceutical compositions, containng one or more anticholinergics, selected from among tiotropium salts, oxitropium salts or ipratropium salts, combined with GENZ 34940

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3. claims: 1-4, 7-23 (all partially), 5

Pharmaceutical compositions, containng one or more anticholinergics, selected from among tiotropium salts, oxitropium salts or ipratropium salts, combined with RDP-58

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4. claims: 1-4, 7-23 (all partially), 6

Pharmaceutical compositions, containng one or more anticholinergics, selected from among tiotropium salts, oxitropium salts or ipratropium salts, combined with a compound of formula 2a

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/001141

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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